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(71) Applicant: TELIA AB (publ) [SE/SE]; Mårbackagatan 11, S-123 86 Farsta (SE).

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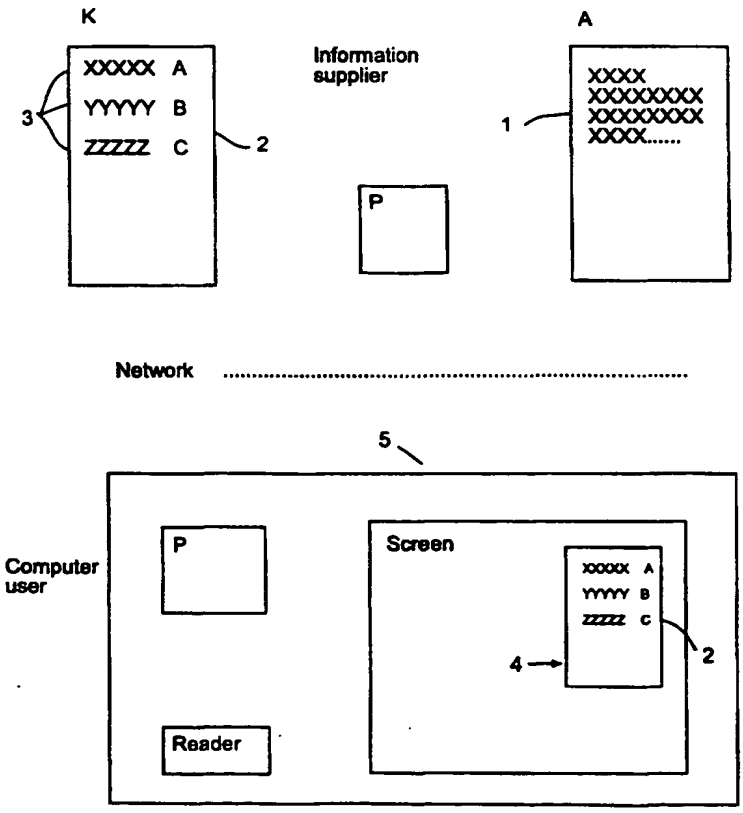
(54) Title: PROCEDURE AND ARRANGEMENT FOR CREATION OF SHORT INFORMATION IN COMPUTER SYSTEM

(57) Abstract

The invention relates to a procedure and arrangement for creation of short information, a "news bill", in a computer system. The invention makes it possible for an information supplier to, in a simple and easy way, present new information to the user via the Internet. The user will have possibility to automatically retrieve updated information which is displayed in a controllable way at the user's computer. By a special program (P) in the user's computer (5), the computer is connected towards an address (K) where an electronic news bill (2) with short information is arranged. The headlines (3) in the news bill after that are displayed in a window (4) at the user's. If the user clicks on a headline which seems interesting, a web browser is activated and the information which is linked to the selected headline is made accessible.



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TITLE OF THE INVENTION: PROCEDURE AND ARRANGEMENT FOR CREATION OF SHORT INFORMATION IN COMPUTER SYSTEM

TECHNICAL FIELD

The present invention relates to a procedure and arrangement for creation of short information, a "news bill" in a computer system. The invention makes it possible for an information supplier to, in a simple and easy way, display new information to the user via Internet. The user will have possibility to automatically retrieve updated information which is displayed in a controllable way at the user´s computer. By a special program in the user´s computer, the computer is connected to an address where an electronic news bill with short information is arranged. The headlines of the news bill after that are displayed in a window at the user´s. If the user clicks on a headline which seems interesting, a web browser is activated, and the information which is linked to the selected headline will be accessible.

PRIOR ART

Within this technical field there are different documents which deal with tailor-made presentation of information, for instance, from the Internet.

EP 0 733 983 describes a screen saver which automatically shows updated information as soon as it is started, i.e. when the user has been inactive for a few minutes. The information which is presented may first have been stored outside the user´s local network.

US 5.649.186 mentions personal presentation of information from Internet. The information, which corresponds to a profile, is automatically edited and presented as an HTML-page to the user.

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WO 97/10558 describes different ways of continuously presenting personal information which is matching certain criteria of a user.

EP 0 628 919 describes an interface which aims at continuously updating electronic information in relation to a user's personal buying profile.

The problem the present invention aims at solving is to, via a network, especially the Internet, give the information supplier a quick and efficient way to inform his/her users that he/she has new information. At the same time the user, who is connected via the Internet, is given possibility to, directly on his/her computer screen, see when new information is to be retrieved and then be able to retrieve the information in a comfortable way.

The invention solves the problem by short information being stored in an advantageous way at the information supplier's, and by the user's computer being programmed to establish connection to a special address, and retrieve and show the information in an easily accessible way.

SUMMARY OF THE INVENTION

Consequently the present invention relates to a procedure and an arrangement to create short information in system with at least one user computer connected via a network to an information supplier. According to the invention, short information is stored at a short information address. The user computer establishes a connection to the short information address and retrieves the short information to display it on the user computer.

Preferably the short information is stored in records together with a belonging link address in such a way that a record can be selected, and further information can be retrieved from the link address.

The invention is defined in detail in the enclosed patent claims.

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BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be described in detail with reference to the enclosed drawing, the only Figure of which illustrates a diagram over the arrangement according to the invention.

BRIEF DESCRIPTION OF PREFERRED EMBODIMENTS

Much information and a lot of news is distributed via Internet and by web-technology. One of the problems is that it as receiver is difficult to know when there is any interesting information accessible. In the same way there is the problem for the one who is compiling the information to, in a quick and appropriate way, inform new readers, if any, that there is new information to be studied.

In the figure is schematically illustrated an information supplier who, via a network, is connected to a computer user or receiver. The information supplier can, for instance, be a news agency which has a number of pages or databases, 1, with information. The pages may be rather extensive and are updated by and by as new information will turn up. Each page, 1, is stored at an address (http) A. In order to make the information easily accessible, and indicate when there is news on a page, the information supplier compiles a news bill, 2. The news bill has its own address, K, and a short information address. The news bill includes a number of headlines, 3, each headline connected to an address A, B, C to respective page with more detailed information. The information supplier also can provide a program P which is necessary to handle the news bill.

As can be seen in the lower part of the Figure, the user has the program, P, which handles the connection towards the address K and the retrieval of the information of the news bill. The user is offered a program packet which includes: A script for automatic installation, a program which is written, for instance, in Java and therefore independent of the computer architecture on which

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it is executed, and an architecture-dependent run-time wrapper.

The program is installed in such a way that it will start automatically as soon as the computer starts. It operates in the following way:

1. The first thing the program does when it starts is that it tries to establish a connection with http to a predefined address, K, at Internet where the short information (the news bill) is located.
2. If it is not possible to establish a connection, the program will wait and then makes new attempts with certain time intervals. While this is happening, the program is minimized and does not distract the user´s attention.
3. When (and if) the connection is successful, the program with http reads the text wich is on the indicated address, K.
4. A small window, 4, is opened at the user´s computer where the textlines which exist are displayed in turn during an appropriate period of time. There usually are more lines than the three which are shown.
5. If the user sees anything which seems interesting he/she clicks somewhere in the text.
6. If the user does not have an active Web-browser, the default-browser will start.
7. The Web-browser then retrieves data from the address A, B, C, which is connected with the text, and displays the data in usual way.
8. With an adjustable periodicity, the program reads a new news bill and then uses these new data henceforth.
9. The changes which have been made in the news bill are marked with, for instance, another colour, blinking (to be selected by the user).

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The user has possibility to minimize the application, making it land up in the activity menu. The symbol which represents the program has two different appearances: One if the content of the news bill has changed since the program was minimized, and another if nothing has been changed.

1. In the program which is distributed to the information supplier, the http-address, K, where the program is expected to find the news bill, is indicated.
2. The program P is packed together with an execution environment och is offered for home loading via the Internet.
3. News bills are compiled. They contain a number of short texts, 3, which shall be shown on the user´s screen together with the http-address A, B, C, where the user´s web browser shall retrieve information when the user clicks on the text.
4. The news bulletin is arranged at its K-address, and corresponding information is arranged for the Web browser to be retrieved.
5. The news bulletins then are updated as required.

Thus, the invention provides a system for creation of a news bulletin or short information with a number of advantages compared with the previously known technology. The progam P requires so small resources (bandwidth, screen space, CPU-memory) that it, in principle, can be run on any computer. The user need not even have a Web-browser to use the service in its basic design. If the user only wants to see "the news bulletin texts" and does not want to read more by clicking on them, the program, P, is all that the user need. It should be emphasized that it is a question of information which is continously shown on the screen, and not via E-mail, Web-browser or other, previously used, procedure.

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The program as such can be implemented, without difficulties, by a person skilled in the art. The design of the program in detail of course can vary to a great extent, and is not described here. The invention is only limited by the following patent claims.

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PATENT CLAIMS

1. Procedure for creation of short information in a system with a user computer connected via a network to an information supplier, c h a r a c t e r i z e d in

- that short information (2) is stored at a short information address (K),
- that the user computer (5) establishes a connection to the short information address (K),
- that short information (K) is retrieved from the address,
- that the short information (4) is displayed on the user computer.

2. Procedure according to patent claim 1, c h a r a c t e r i z e d in that the short information is stored in records (3) together with a belonging link address (A,B,C), that more detailed information is stored at the link address (A), that a record is selected, and that the more detailed information (1) is read by a reader at the user computer (5).

3. Procedure according to patent claim 1, or 2, c h a r a c t e r i z e d in that the user computer (5) establishes connections to the short information address (K) at certain time intervals.

4. Procedure according to patent claim 1, 2, or 3, c h a r a c t e r i z e d in that retrieved short information (2) is compared with previously retrieved short information, and new information is displayed in an emphasized way.

5. Arrangement for creation of short information in a system with a user computer connected via a network to an information supplier, c h a r a c t e r i z e d in

- that short information (2) is stored at a short information address (K),
- that the user computer (5) has a program (P) to establish a connection to the short information

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address (K), to retrieve short information (2) from the address (K); and

to display (4) the short information at the user computer (5).

6. Arrangement according to patent claim 5, c h a r a c t e r i z e d in that the short information (2) is stored in records (3) together with a belonging link address (A,B,C), that more detailed information (1) is stored at the link address (A), and the user computer (5) has a reader for reading the more detailed information (1).

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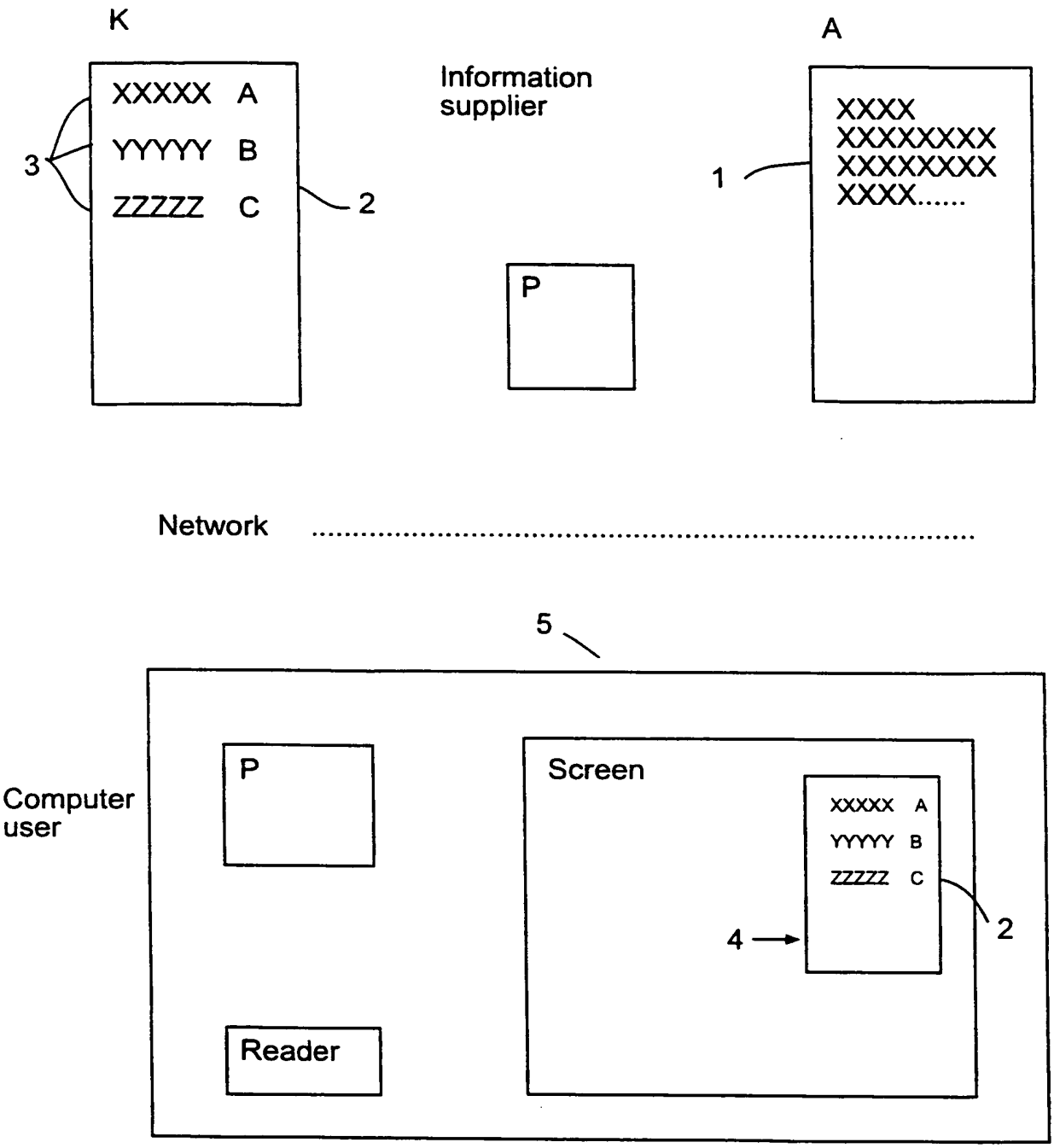

Figure 1

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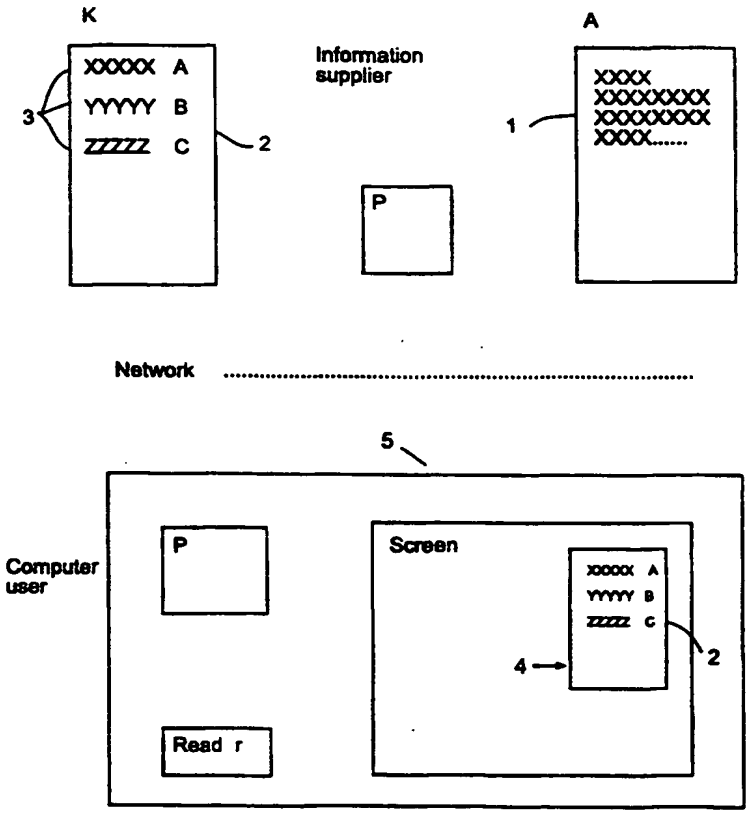

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/SE 98/01802

A. CLASSIFICATION OF SUBJECT MATTER

IPC6: G06F 17/30
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC6: G06F, H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPODOC, WPI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0749081 A1 (POINTCAST INC.), 24 May 1996 (24.05.96)	1,3,5
Y		2,6
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X	WO 9736233 A1 (ATHENA TELECOM LAB, INC.), 2 October 1997 (02.10.97)	1,5
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X	WO 9731319 A1 (AT & T CORP.), 28 August 1997 (28.08.97), abstract	4
	--	

[X] Further documents are listed in the continuation of Box C. [X] See patent family annex.

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
26 March 1999	30 -03- 1999
Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Facsimile No. + 46 8 666 02 86	Authorized officer Sylvain Dunand Telephone No. + 46 8 782 25 00

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International application No.
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	1996 Usenix Technical Conference, 22-26 January 1996, (San Diego, CA) Fred Douglis et al "Tracking and Viewing Changes on the Web", first paragraph; second paragraph; section 2.3	2,4,6
P,X	EP 0834822 A2 (CANON INFORMATION SYSTEMS, INC.), 8 April 1998 (08.04.98)	1,2,5,6
A	WO 9726729 A2 (ROBINSON, GARY, B.), 24 July 1997 (24.07.97)	1-6

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INTERNATIONAL SEARCH REPORT

Information on patent family members

02/03/99

International application No.
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WO 9736233 A1	02/10/97	AU 1944797 A	17/10/97
		AU 1456597 A	18/08/98
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WO 9731319 A1	28/08/97	CA 2246650 A	28/08/97
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